



# KOREAN PATENT ABSTRACTS(KR)

Document Code:B1

(11) Publication No.1019970001259 (44) Publication Date. 19970204

(21) Application No.1019960050579 (22) Application Date. 19961031

(51) IPC Code:

C04B 35/465

(71) Applicant:

KOREA INSTITUTE OF SCIENCE AND TECHNOLOGY

(72) Inventor:

CHUNH, HYUNG-JIN

KIM, HYUN-JAE

KIM, KYOUNG-YOUNG

YOON, SUK-JIN

YOON, SANG-OK

NAKAMURA DETSUROU

ITO MICHIRU

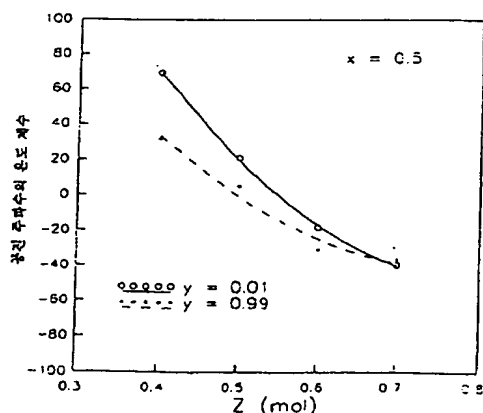
(30) Priority:

(54) Title of Invention

DIELECTRIC COMPOSITION FOR HIGH-FREQUENCY WAVE

Representative drawing

(57) Abstract:



Dielectric ceramic composition for high-frequency wave is described which has high quality coefficient(Q value) and dielectric constant, and good temperature coefficient of resonance frequency. The dielectric ceramic composition may be represented as following formula:  $(1-z)(\text{Sr}_{1-y}\text{Ca}_y)\text{TiO}_3 - z\text{La}(\text{Zn}_{1-x/2}\text{Mg}_{x/2}\text{Ti}_{1/2})\text{O}_3$ , where, the range of x is from 0 to 1.0, the range of y is from 0.01 to 0.99 and the range of z is from 0.4 to 0.7. The dielectric composition according to the

invention has dielectric constant of 33.1 to 60.2,  $Q_{\text{xf}}(\text{GHz})$  of 25,060 to 66,140, and the temperature coefficient of resonance frequency(TCF) ranging from -39.35 to 83.60 ppm/deg. C, which TCF being able to be controlled at a range of  $\pm 10$  ppm/deg. C depending on amount of addition of impurities, so that the ceramic composition may effectively be used in telecommunication system.

BEST AVAILABLE COPY

(19) 대한민국특허청(KR)  
(12) 공개특허공보(A)

(51) Int. Cl. 6

(11) 공개번호

C04B 35 /465

(43) 공개일자

(21) 출원번호 10-1996-0050579

(22) 출원일자 1996년 10월 31일

(62) 원출원 10-1994-0013994

원출원일자 : 1994년 06월 21일

(71) 출원인 한국과학기술연구원 김은영

(72) 발명자 서울특별시성북구하월곡동391  
정형진

서울특별시성동구구의동208번지22호궁전빌라나동102호

김현재

서울특별시강남구압구정동한양아파트5동306호

김경용

서울특별시강남구일원동6838호

윤석진

서울특별시노원구상계6동주공아파트221405호

윤상옥

강원도강릉시호남동1005번지강릉1차아파트A동507호

나카무라데쓰오

일본가나가와켄요코하마시미도리꾸후지가오까24121

이또미찌루

일본가나가와켄요코하마시미도리꾸사꾸라다이비비7111

(74) 대리인 주성민

서울시종로구운니동11431서울빌딩

심사청구 :

(54) 고주파용 유전체 조성물

요약

[목적][구성] 1. 높은 품질 계수(Q값)의 유전율을 가지며 또한 공진 주파수의 온도 계수가양호한 것을 특징으로 하는 고

주파용 유전체 조성물.